SUMMARY

Indiana Department of Environmental Management
Antidegradation Stakeholder Meeting
Indiana Historical Society, Classrooms A & B
450 W. Ohio Street, Indianapolis
10:00am to 5:00pm EDT
Tuesday, April 29, 2008

- Introduction by Commissioner Easterly
  - Individual introductions

- IDEM Overview by Martha Clark Mettler (PowerPoint presentation)
  - Draft Rule has not been changed since March 14, 2008
  - Recent history
    - 70 pages for summary of comments from April 1, 2005 draft told us we had further work to do
  - IDEM Goals
    - Meet the requirements of the Clean Water Act
    - Implementable by IDEM
  - March 14, 2008 draft rule. Sec 1: Applicability
    - Reasonable Potential to Exceed
    - Mixing Zones
    - If the new or increased discharge is too small to require a permit limit based on RPE, then no antidegradation review is required
  - Sec 2: Definitions
  - Sec 3: Antidegradation Standards
  - Sec 4: Non Significant Lowering
    - Mercury is a problem
  - Sec 5: Non Significant Lowering Justification
    - *Should this review be combined with the review of the application for the associated NPDES permit?*
  - Sec 6: De Minimis
    - Two options
      - Option 1: The more stringent of the WQBEL calculated without the benefit of a mixing zone or default technology based effluent limit
      - Option 2: Less than 10% of the unused loading capacity
    - For OSRW/EUW de minimis is the representative background concentrations
  - Sec 7: Significant lowering
    - Correction from draft – unless it is an activity listed in 4b (not 4c)
  - Sec 8: Necessary Test

        - *Should the question of "why the discharge is necessary at all" be answered separately?*
    - Sec 9: Alternatives Analysis
        - Alternatives Analysis will be evaluated by IDEM in a manner similar to "knee of the curve" of cost benefit used by the Long Term Control Plan review process.
    - Sec 10: IDEM Review
    - Sec 11: Water Quality Improvement Project
    - Issues not addressed in the March 14, 2008 draft rule
        - IDEM will decide which General Permits cause a significant lowering of water quality and open those for rulemaking.
        - 401 Water Quality Certifications
    - Proposed Antidegradation Implementation Procedural Steps
        - *de minimis must be demonstrated?*
        - Any Significant Lowering of Water Quality in an OSRW requires a Water Quality Improvement Project

Questions/Comments:

1. What is the information necessary to prove a Non Significant Lowering activity?
2. How can you tell if a General Permit is a Non Significant Lowering?
3. What if an activity is a Non Significant Lowering but also causes an increase beyond the de minimis?
4. Is there an inconsistency between Slide 10 and 11?
5. How are the PEQ and PEL calculated? What is the uncertainty factor?
6. How will you accomplish narrative standards for RPE?
7. Is there a distinction between new and existing RPE?
8. Is significant mitigation required for every 401 certification?
9. Forms need to be clearly written to allow the general public to understand them.
10. When requesting a new limit, does that trigger a justification?
11. We need to get rid of the term, "Non Significant Lowering of Water Quality". (EPA will not allow Indiana to use the terms "exception" and "exemption".)
12. If you're not asking for a new or increased permit limit, you won't need the flow chart.
13. For the "Accept default limits" box – what time frame are you thinking it will take to work out the default technologies?

- Regulated Community Overview by Patrick Bennett (PowerPoint presentation)
    - Coalition came together in 2000/2001.
    - Tried to stay high enough in altitude to work things out
    - Reasonable triggers for review. Permitting certainty is critical to businesses and municipalities
    - Appropriate exclusions from full review
    - Reasonable process for obtaining approvals

- Flow chart
  - Have more comments on the draft rule
- Neil Parke will walk you through the flow chart
  - First, is there a reasonable potential to exceed?
    - Additional pollution
    - Water conservation
  - Variances
    - Looks at technology and economics
    - Should be dealt with up front
  - Does the discharge constitute a non significant lowering?
    - Is it short term? (e.g., construction related)
  - Is there a Tier I criteria?
    - If no, proceed with permitting
    - A Tier II value has no significant lowering due to conservative assumptions.
  - Is the discharge a BCC?
    - Storm water discharge questions
    - Water conservation that increases a BCC limit
  - Is the discharge below de minimis?
    - Is it uniform across the board to detect?
    - What do we set scientifically in order to account for no observable effects?
  - Approvable "necessary and support important economic social development" test?
    - An issue for municipalities
    - Default-based effluent limits – how are they determined?
    - Process should be simple: not create a whole new effluent guideline
    - How do you map out "important economic social development"?
      - Is IDEM the sole agent for the State to decide?
      - Where is there a consistent decision criteria?
    - This box needs to be refined
      - As noted in the Barnes report
  - Is the discharge to an OSRW or EUW?
  - Will the discharger perform an overall water quality improvement project?
    - Need guidance on decision process
    - E.g., Want to increase pollutant A and remove pollutant B with an overall benefit
    - E.g., methanol. Want to increase methanol and reduce copper. What is the trading concept? That needs to be mapped out. (e.g., toxicity rating)
- Doug Bley
  - Still not addressed by the flow chart:

        - RPE evaluation. Where does that fit in for existing effluent constituents that are not permitted?
        - Tributaries to an OSRW
    - We tried to simplify the flow chart. A Barnes report suggestion. Let's talk about this then we can talk about what goes into the boxes.

Questions/Comments:

1. Box 1. New discharge, below the RPE, but much more than before – is that exempted?
2. Box 2, what kind of variance?
3. Box 3, where do pathogens, phosphorus come in?
4. Are you exempting phosphorus?
5. Box 4, the "no" pathway. If it's not Tier I it just falls out?
6. Are there municipal issues boxes that need to be added to this flow chart?
7. Important that this flow chart capture the process at the higher level.

- Fred Andes
    - Statutory deadlines for when the renewal for the NPDES must be applied for. Antidegradation must be consistent with that – which are not in the draft rule.
    - 4(b)(8) unsewered areas. Don't understand terminology for "significant change of characteristic of the discharge".
    - 4(b)(5) design flow. Which one? Average daily or peak hourly.
    - Stormwater policy for municipals. You want to promote maximizing flow to the plant. Want to encourage more treatment, better treatment.
    - Why does treated stormwater need to be returned to the same waterbody?
    - Taking action to alleviate a public health problem should have expedited antidegradation.
        - don't want to slow them down
    - How does an antidegradation policy affect an MS4 permit?
    - Most of the issues we've discussed with the municipal community have been addressed here but they have additional specific concerns.

Questions/Comments:

1. When a municipality is treating existing constituents in stormwater, that new permit limit should have a pretty quick step around the antidegradation process.
2. The rule should encourage the right activities. There shouldn't be a disincentive to a POTW to accept a new connection such as for failing septic systems or failing package plants.
3. We should consider a different threshold review for existing unpermitted constituents discovered through special monitoring.

4. The presentations are the concepts. Because we are not asking questions does not mean we won't have questions later.

- Environmental Community Overview by Jeff Hyman (PowerPoint presentation)
    - Issues presented today
        - De minimis discharges/cumulative cap
            - Develop alternatives to loading capacity to define and implement de minimis
        - Necessary Test
            - Consolidate duplicative requirements; reconcile conflicting requirements.
        - OSRWs
    - Omissions in draft rule
        - Antidegradation and CWA Section 401 Certifications
        - Antidegradation and General Permits
    - Designing De Minimis – Brad Klein
        - This morning's presentations on the flow charts were good. We'll be diving into some of those boxes.
        - De minimis is important and difficult to understand
        - Scope of de minimis doctrine
            - Not mentioned in federal antidegradation regulation
            - EPA will review state rules on a "case-by-case basis" to ensure that exemption does not allow significant degradation either individually or cumulatively
        - IC 13-18-3 (a/k/a SEA 431) requires de minimis in OSRWs
        - de minimis exceptions should only apply to "trifling matters".
        - USEPA's interpretations (E.King memo (2005))
            - Can't allow "significant degradation"
            - Consider "assimilative capacity" (IDEM calls "loading capacity")
            - Incorporate a "cumulative cap"
            - Consider overall pollutant loading
        - De minimis – draft rule Sec. 6
            - IDEM uses three concepts: DTBELs, "end of pipe" WQBELs, and 10% "unused loading capacity"
        - Concerns with DTBELs
            - Focus exclusively on treatment technology, rather than pollution avoidance or minimization
            - May be difficult and/or controversial to identify and keep current
            - May be inappropriate in low-flow streams and sensitive waters
        - Solutions to DTBELs
            - Must consider pollution prevention or minimization alternatives before applying DTBEL
            - Ensure limits reflect best treatment technology possible

        - Restrict DTBELs for low-flow waters
    - Loading or "assimilative" capacity definition (E.King memo (2005))
    - Loading capacity example
        - *When can you consume part of that loading capacity?*
        - E.g., first bite, second bite
    - Flaws in loading capacity approach
        - Allows incremental "creeping" degradation
            - Potential solutions: Cumulative cap (strongly recommended by USEPA)
        - Allows huge unnecessary new pollution in large volume waters
            - Potential solution: Indiana must place overall limit on volume of de minimis new/expanded loading
        - Cannot apply % of loading capacity for pollutants lacking numeric criteria
            - Possible solutions: first consider options for minimizing or redirecting the discharge; apply narrative criteria "translator" if practicable; for common pollutants (e.g., nitrogen and phosphorus) use DTBELs; restrict or eliminate de minimis for certain pollutants
        - Cannot apply to General Permits
            - Possible solutions: design general permit template so that they allow only de minimis degradation in all cases; do not allow use of general permits in sensitive waters; ensure that there is a loading cap on general permit sources; build in public notice of general permit usage; preserve authority of IDEM to require individual permits where general permit would allow more than trivial degradation
    - Revised draft should:
        - Consider opportunities to minimize or redirect discharges
        - Refine DTBEL concept
        - Incorporate reasonable cumulative cap
        - Make clear that substantial new or increased discharges to large waters are not considered de minimis
        - Make clear that pollutants are covered that lack numeric criteria
        - Ensure that general permits allow only de minimis pollution

Questions/Comments:

1. The Kentucky case allows antidegradation to be upheld by justifying the judgment.
2. Why is WQC not appropriate for a zero-flow stream for not requiring an antidegradation determination.
3. The calculation you proposed for the unused loading capacity – there's no need for a cap.
4. You assume a facility operates at the new permit limit
5. How do you redirect a dischargers location when there are no alternatives?

6. How would you address tributaries to Lake Michigan or other OSRWs?
7. How do you handle effluent dominated streams?
8. RPE and WQBEL are conservative in their protection.
9. A second discharger may not represent an increase in the cumulative load.

- Necessary Test (Sections 8 through 10 in the current IDEM draft) – Ann Alexander
  - Basis for the Necessary Test – 40 CFR 131.12(a)(2)
    - Necessary. Is it possible to minimize, mitigate or eliminate the proposed discharge?
    - To accommodate an important economic or social benefit. Is it "clear and important"? (USEPA Water Quality Standards Handbook Section 4.5)
  - Opportunities for Improvement
    - Conflicting decisional requirements. Concerned with the number of decision points in the IDEM draft
    - Conflicting application requirements
    - Results in weakening of "necessary test"
  - Overall objectives
    - Application. Single consolidated application
    - Decision criteria. Track the language of the federal antidegradation policy necessary test
    - Stringency. Reflect USEPA
  - Suggestions for structure
    - Necessary
      - pollution prevention
    - important economic or social development
      - baseline situation
      - net impact
      - other developments
    - area in which the waters are located
      - scope of waters impacted
  - What should the application contain?
    - Complete analysis of alternatives
    - Delineation of relevant geographic area
    - Description of baseline economic and social conditions
    - Description of <u>net</u> social and economic benefit and basis for claimed importance
  - What should be the decision criteria
    - Is the discharge necessary?
    - Has the applicant clearly demonstrated that the social and economic development important in the area
  - What about de minimis dischargers?
    - Is the discharge necessary? Modified to: pollution prevention and substitution alternatives; discharge…

- If the discharge is necessary, applicant must accept DTBELs or other available default limits

Questions/Comments:

1. How do other states compare to this concept?
2. Can you better define the geographical area analysis?

- Antidegradation and OSRWs – Bowden Quinn
  - 327 IAC 2-1-2 Maintenance of surface water quality standards. The starting point. Originally OSRWs had no degradation allowed. Viewed as a "no growth" policy.
  - Lead to change in State law creating the "overall water quality improvement". IC 13-18-3-2.
    - Implementation of a water quality project
      - Required in Sec. 11 of the draft rule
    - Pay a fee into a watershed improvement fund
      - Should be for an identified water quality improvement project that must be done in a reasonable amount of time (e.g., one year)
    - Probably cannot do this all by rule, will need a nonrule policy document to flesh this out.
  - Need to add a requirement for the Water Pollution Control Board to hold a public hearing on the tentative OSRW antidegradation decision of IDEM prior to a final permit decision (similar to the current 327 IAC 5-2-11.7(c)(3)).
  - 327 IAC 2-1.3-10 says project or fee; 327 IAC 2-1.3-11 says fee is to fund a project that is approved to have overall improvement. Bowden feels Section 11 is better than Section 10.

Questions/Comments:

1. The language of SEA 431 says, "pay a fee to a fund".
2. The question is what is the applicant's responsibility to design an appropriate project and what is IDEM's responsibility if a fee is paid to the fund?
3. The projects need to have offsetting water quality improvements, are you just looking at chemical (instead of physical or biological)?
4. Can you explain why it's important for the WPCB to get involved in an antidegradation demonstration in an OSRW?
5. Would you advocate a second public hearing beyond the required single public hearing?
6. Are you advocating the project be provable and on the ground before the applicant can go ahead?
7. It seems to me public participation can be talked through as part of the antidegradation process. Add public participation to the flow chart.
8. How realistic do think someone will go for an antidegradation project over paying $500,000?

9. You’re suggesting a nonrule policy document which has less than the force of law.
